China's Interest Rates System & Tendency of Interest Rates Polices

July 8th, 2004, HongKong

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1. Monetary Control: from quantity means to price means

China's Monetary Control had been dominated by quantity adjustment methods for a long period

- **Two pre-conditions for the feasibility of the quantity adjustment means:**
  - Money supply and macroeconomic variables (economic growth, price index, employment, and international income and expense) defined by it should keep stabilized correlation with each other.
  - Monetary authority can efficiently adjust the money supply by controlling the base money.
- **Since 1994, the two preconditions have waned.**
  - M0 first, then M1 and M2, money supply gradually loses the stable correlation with the macroeconomic variables.
  - The controllability, measurability, and correlation of money supply gradually wane.
  - 在中国，货币供应量应是中性的（ NEUTRAL ）
  - Monetary authority faces difficulties to regulate the supply of base money.

The necessities to change

- **Quantity adjustment means gradually fails,because of four factors:**
  - First,the development of financial market
    - The change of money supply mechanism
    - The change of the monetary policy transmission mechanism
  - Second,errors in monetary statistics: impacted by financial innovations.
  - Third,the continuous opening up of economic system: impacted by external factors.
  - Fourth,“lost” money: is GDP underestimated?
  - **A regular process in other countries**

2. China's Interest Rates System: from control to dual-track approach

The evolution of China's Interest Rate system: from strict control to dual-track approach

- Within the traditional system: interest rate was under strict control:
  - The rationality of interest rate's existence was oppugned
  - Interest rate was only one of cost accounting tools
  - There were nearly one hundred "discriminatory" interest rates in order to satisfy the government's needs to fully interfere economy
  - Interest rates were chronically low in order to support production in China, and due to the long-existed inflation, negative interest rates were very common before the middle of 1990s
- China's earliest interest rate reform was only to "smoothen" the interest rate system
  - Adjusted the average level of interest rates: to change the situation of long-term negative interest rates
  - Adjusted government-managed interest rates: to form a consistent prompting mechanism

The achievement of market based reform of interest rate: informal-finance organizations

- Same as other reforms in China, the earliest process of market-oriented reform of interest rate emerged in non-state-owned institutions as well as the integrated sections of state-owned and non-state-owned institutions.
- Form: inter-bank borrowing market and bond repurchase
- Turnover: Chronically stays at 20% - 40% of annual loan increments
- Interest Rates: determined between borrowers and loaners. But due to the strict governmental control over acquirability of capitals, quantities, and prices, these kinds of "market interest rates" had to bear the risk of beating around the controls, therefore, the rates are almost as high as usuries'

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The achievement of market based reform of interest rate: formal-finance organizations

- 1978 – early 1990s: Prepared for reforming, and constantly changed the interest rate levels and structures
- Early 1990s, market based reform emerged aiming at changes of pricing mechanism:
  - In 1992, T-Bonds underwriting represented the beginning of interest rate market based reform
  - In 1994, the conference about money market development and interest rate liberalization between Bank of China and IMF established the path to market based reform of interest rate
  - In 1996, inter-bank offer rates were deregulated
  - In 1997, inter-bank bond repo and cash bond rates were deregulated
  - In 1997, discount and inter-bank discount rates were deregulated
  - In 1998, financial bond interest rates were issued by tender
  - In 1999, t-bond rates to be issued by tender were restored
  - In 1999, floating interest rates were deregulated for CDs in large amount of insurance companies
  - In 2002, market based reform of interest rate was trial-tested in rural credit cooperatives of eight counties, extending the floating range of loan interest rates to 100%, that of deposit interest rates to 50%. In September, the trial was spread to almost all provinces.
  - In Dec. 2003, loan interest rates were raised by 70%, and deposit interest rates were deduced by 10%

The achievement of market based reform of interest rate: The revolution of regulating mechanism

- As early as 1985, the central bank has established the regulating system of market based reform which consists of reserve system, inter-bank discount system, and open-market operation. But it did not work for a long period.
- In 1998, the loan assignment system was finally abandoned. Reserve rate, inter-bank discount rate, and open-market operation have become the main regulating methods, which represents the central bank's conversion from administrative regulating to market regulating.
- In 2000, open market operations became the primary regulating method. But the regulating still focused on "quantity" control.
- In 2002, central bank papers were issued in a large scale in order to broaden the effects on monetary base and monetary supply by hedging foreign exchange reserve.
- In 2003, after October, the central bank began to pay direct attention to the impact on interest rates by its monetary policies. Aiming at the high interest rates, the central bank issued paper by tender as well as added the "quantity" bidding method.

The characteristics of "dual-track" approach of China's interest rate system

- The strictly regulated interest rates: the RMB deposit rates for individuals and enterprises; the USD deposit rates for small amounts.
- The liberalizing interest rates: the bank lending rates and the "issuing rates" of corporate bonds.
- The liberalized interest rates: RMB protocol deposit rates; large-amount lending and deposit rates in foreign currencies (mostly USD); and all other financial market rates and money market rates except the "issuing rates" of corporate bonds.
- Central Bank Interest rates:
  - Inter-bank discount rates
  - Refinancing rates
  - Central bank paper rates
  - Interest rates of reserves and excess reserves

The Drawbacks of the "Dual-Track" Approach

- Not enough consideration in term structure and risk structure during interest rate system reform
- Lack of researches on potential arbitrages amongst different interest rates during the reform
- The impacts on the formation and efficiency of China's interest rate system by the two major characteristics of China financial system:
  - Financial structure is dominated by banks, especially state-owned banks
  - RMB's fixed exchange rate to USD

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The future developments of interest rate market based reform

- To reform the foundation of forming interest rates: The levels, risk structures, and term structures should be determined during the competitions between monetary supplies and demands.
- To Seek the "benchmark" interest rates: one or several benchmark interest rates, which have decisive impacts on interest rate market, should be established by promoting the development of money market.
- To establish the liberalized regulating mechanism: monetary authority should take advantages of the market based reform methods, and regulate the benchmark interest rates by its own trading activities in the public markets
- To realize the gradualness and chronicity of the interest rate system reform

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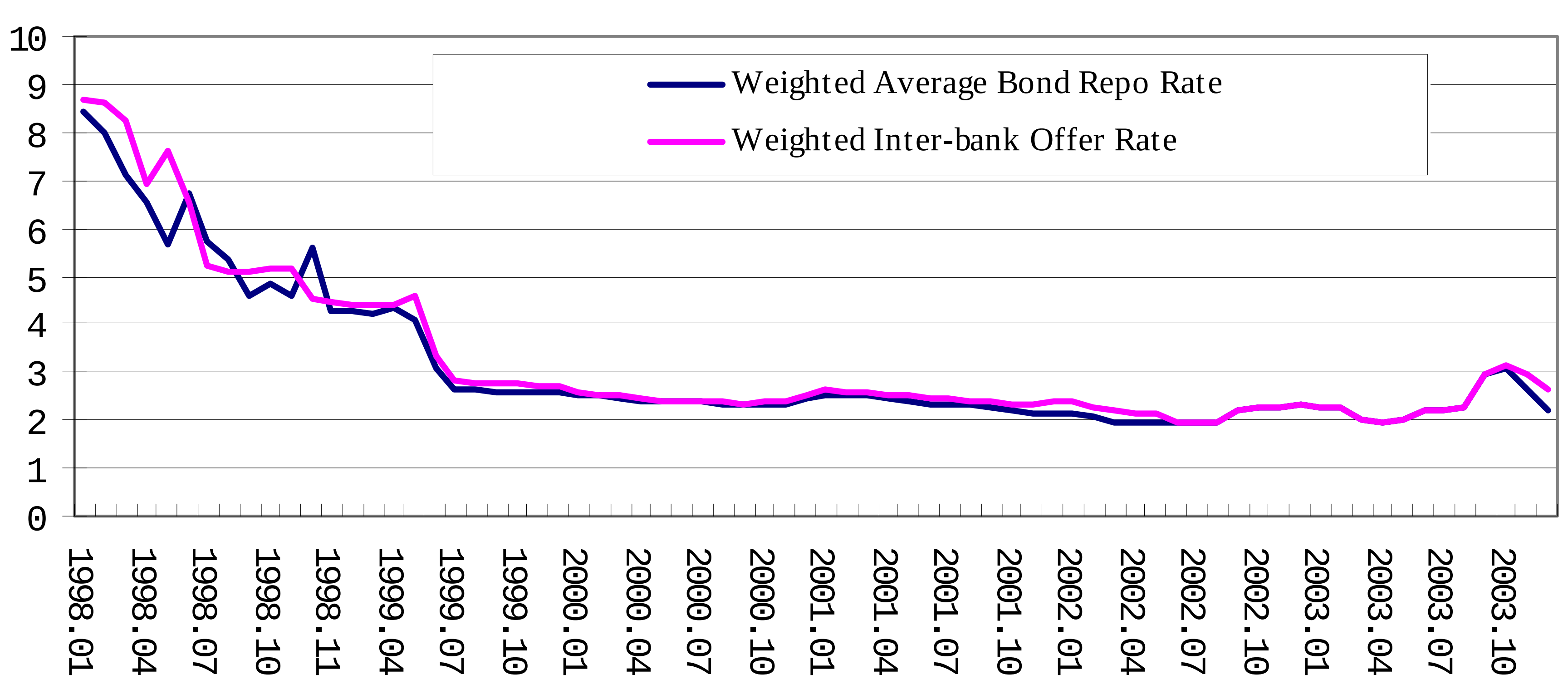
3. The characteristics of China's Interest Rate System

1. The overall trend of interest rates: downtrend



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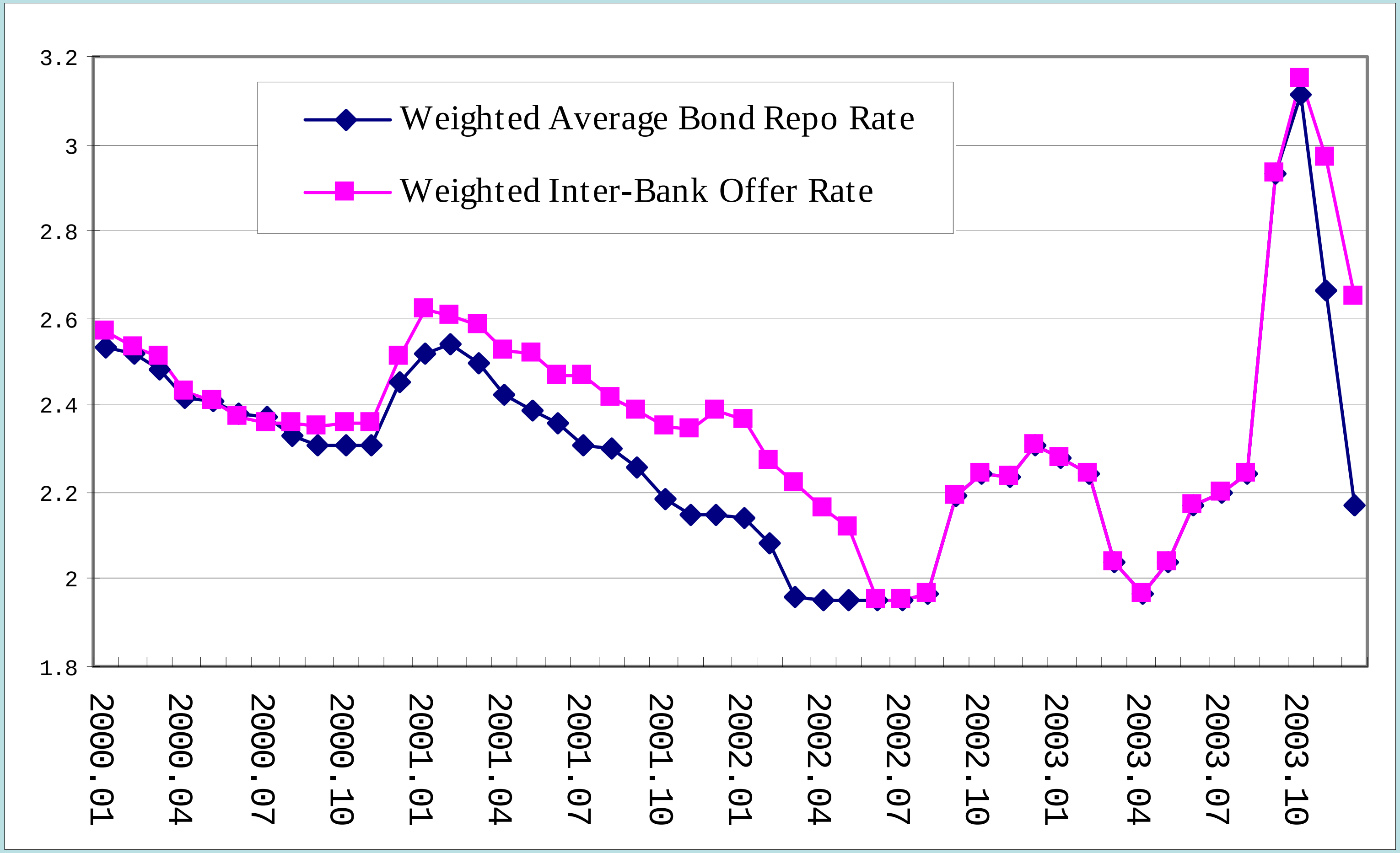
After 2000: acutely fluctuated interest rates



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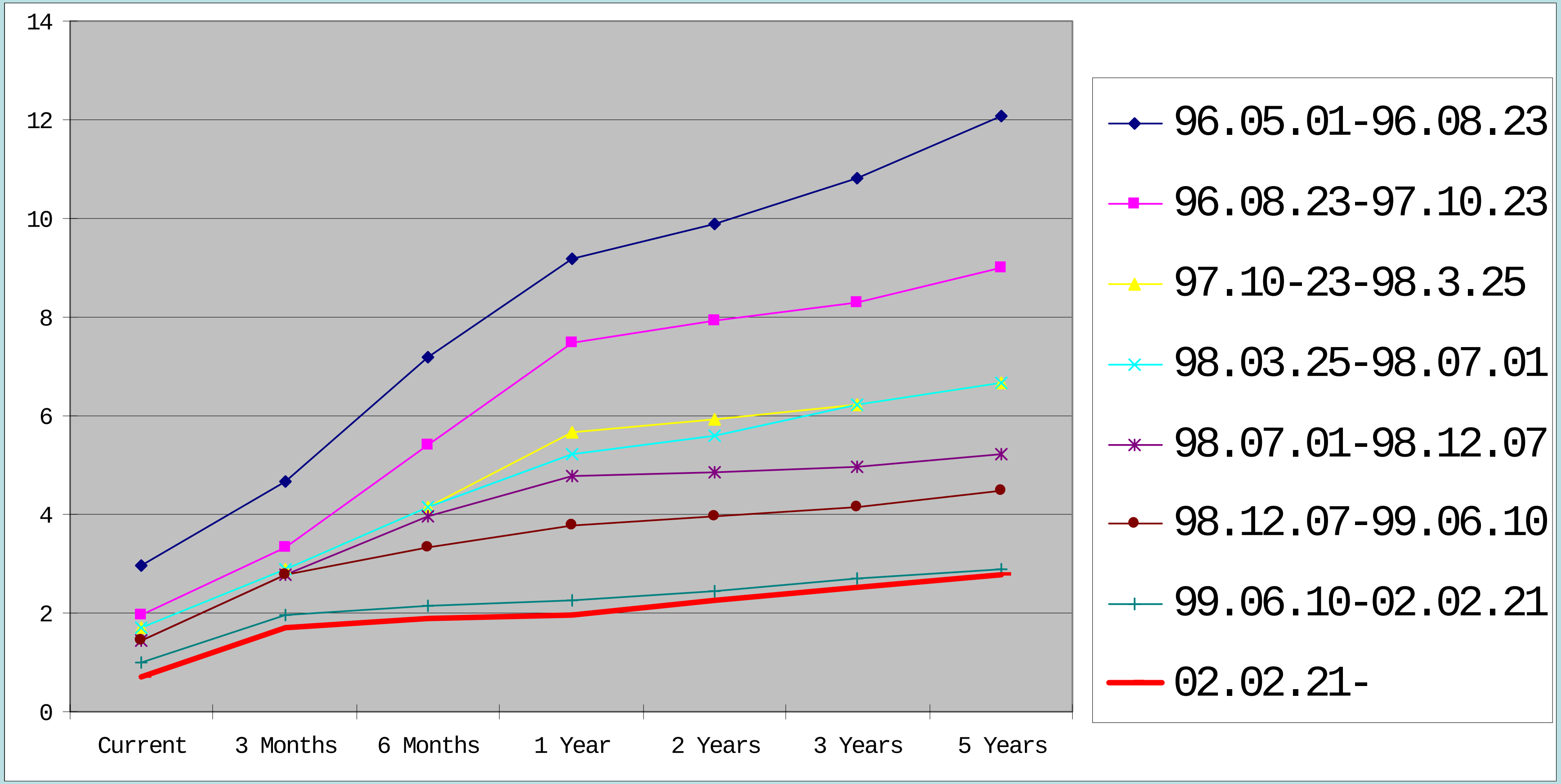
2. RMB Deposit Rates



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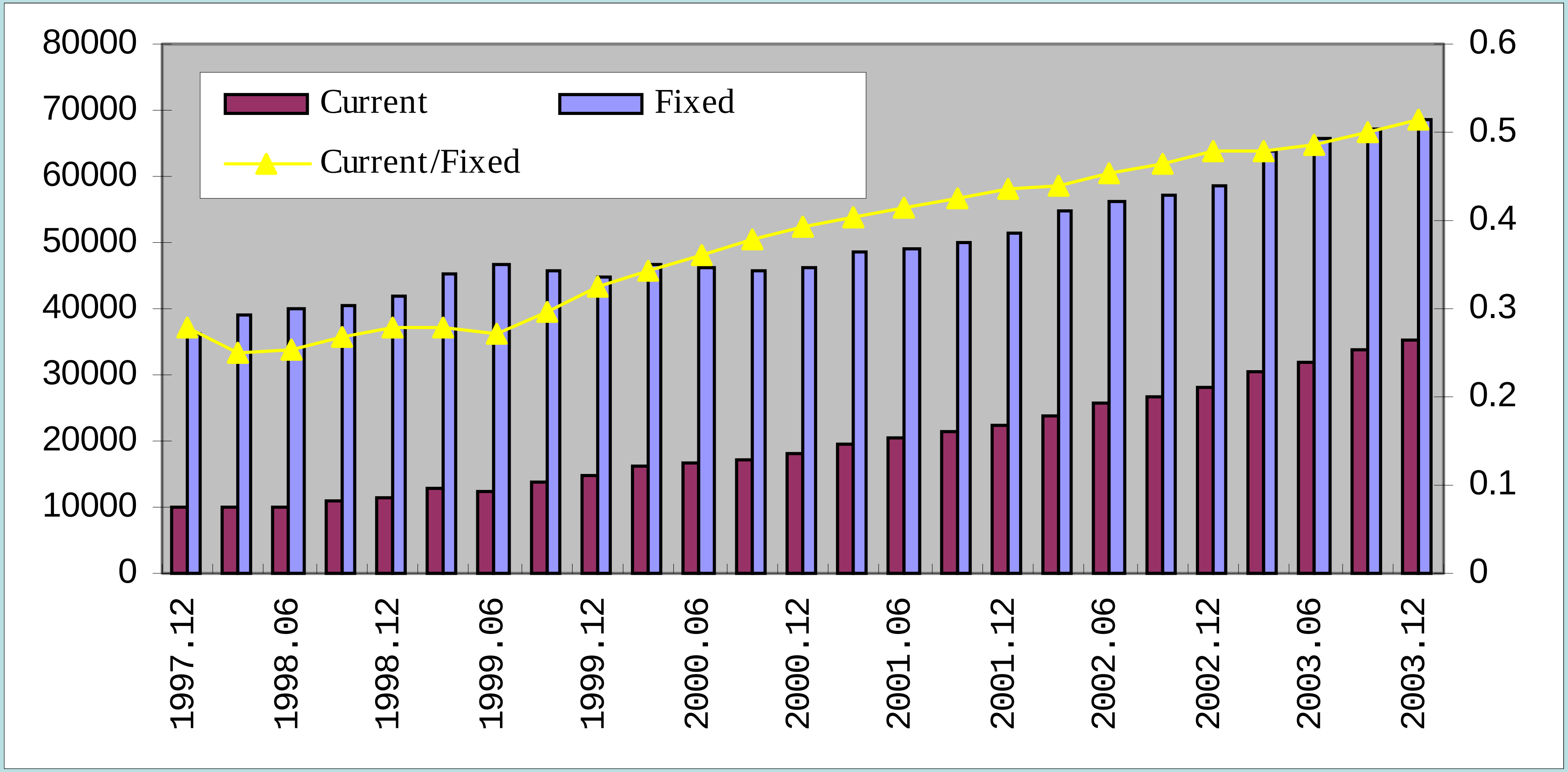
The Structure of Individual Deposits



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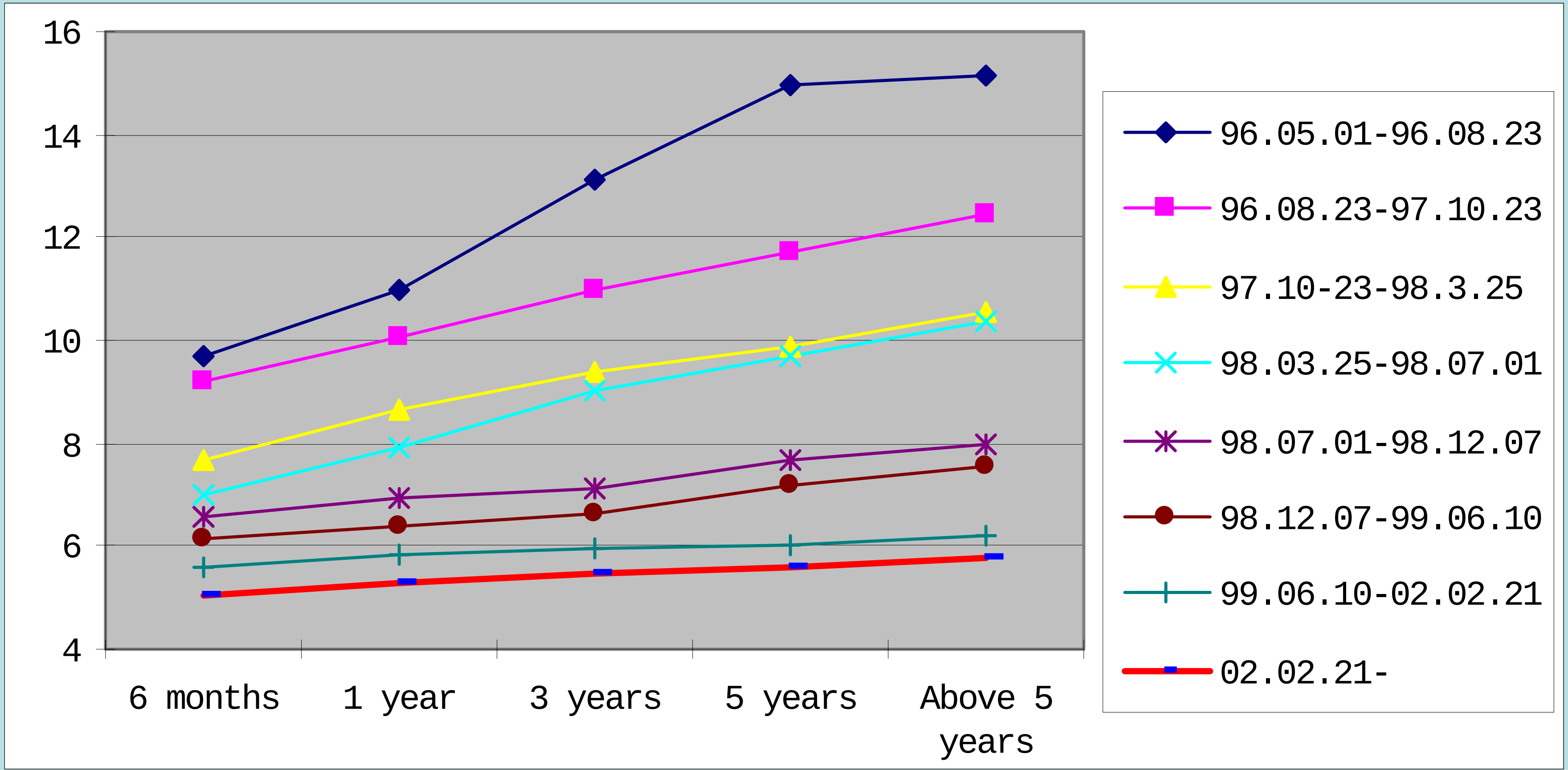
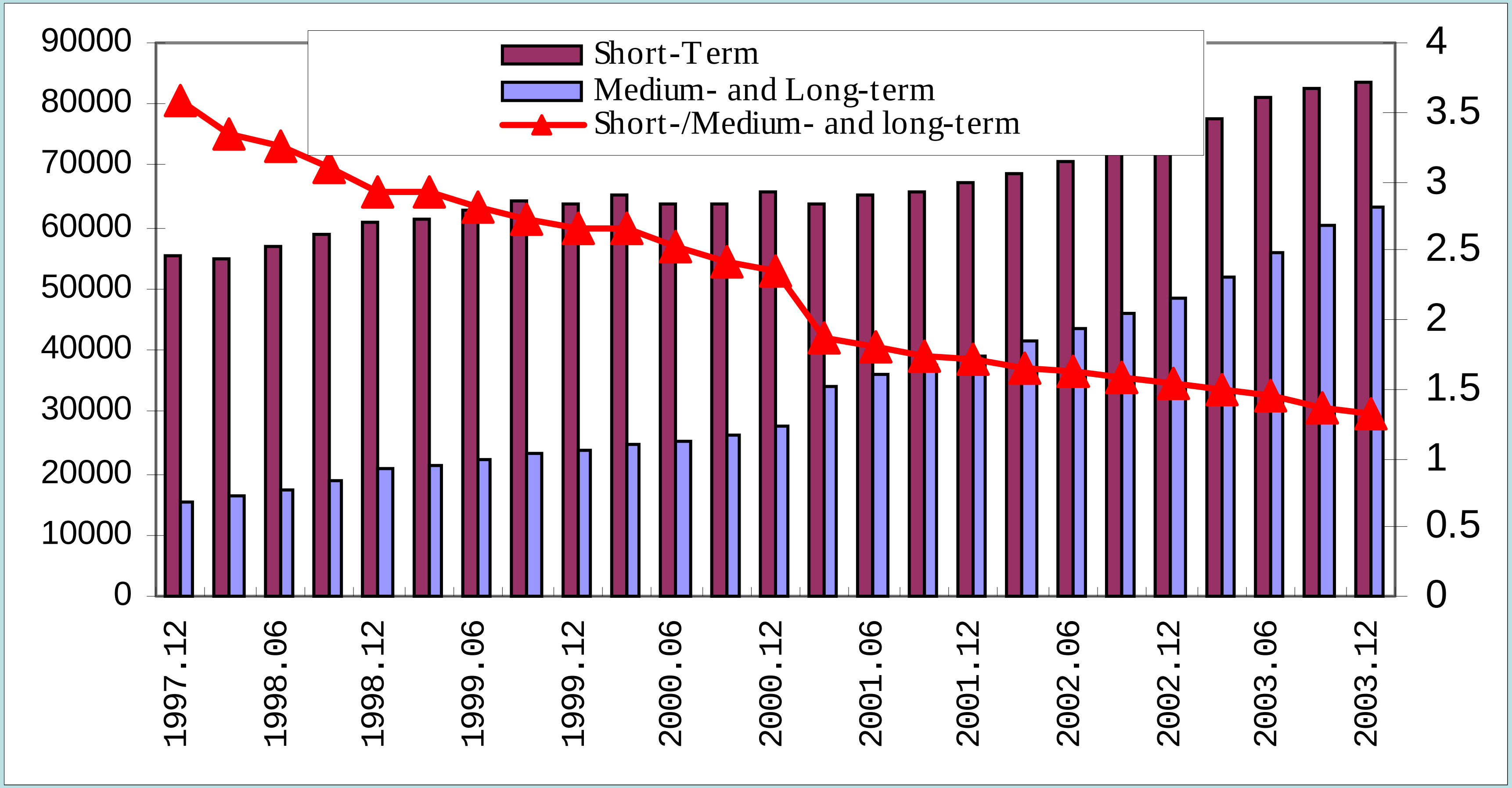
Several Observations on Deposit Rates

- The downtrend of interest rates had no visible impacts on the growth and growth rate of the total deposit amount. Same result can be retrieved by calculating and testing with real interest rates
- The growth of deposit is actually periodic, that is, the decisive factor to determine the deposit amount is the income adjustments caused by economic periods when deposit is still the primary investment method of Chinese people.
  - The real interest rates, or even the “negative interest rates”, are not the main factors.
- The adjustments of term structure of interest rates have notable impacts on the term structure of deposits. That is, the term structure of interest rates has been adjusted into a horizontal level, and the profit gap between long-term and short-term deposits gradually wane. The individual deposit structure is trending short-term.

3. RMB Lending Rates



Lending Structure trends long-term



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Several Observations on Lending Rates

- From 1994 to 2003, neither nominal lending rates nor real lending rates can effectively reflect the changes of the loan increments
  - Local governments and SOEs have been the primary borrowers. The interest rate elasticity of loan demands is very low.
  - As the major loaners, the banks, especially state-owned banks, have low sensibilities on interest rates
- Since 2001, the expectations of rises of future investment product prices have driven the loan increments, and the loan increment has also driven the rises of investment product prices.
- The profit gap between short- and long-term loans is gradually deducing. But financial institutes loans are trending long-term instead of short-term.
  - The rapid development of industrialization requires enormous long-term capitals
  - The serious lagging in the development of capital market
  - The effect of supervisions on bank lending

The Further Problem: The mismatching of term structures in balance sheets of banks

Items	2003		2002	
	Balance(%)	Increment (%)	Balance(%)	Increment (%)
Fixed Deposits (more than one year to maturity)	45.9	44.9	45.3	45.3
Medium- and long-term loans (more than one year to default)	90.3	94.5	89	51

The mismatching has accumulated enormous credit risks and liquidity risks

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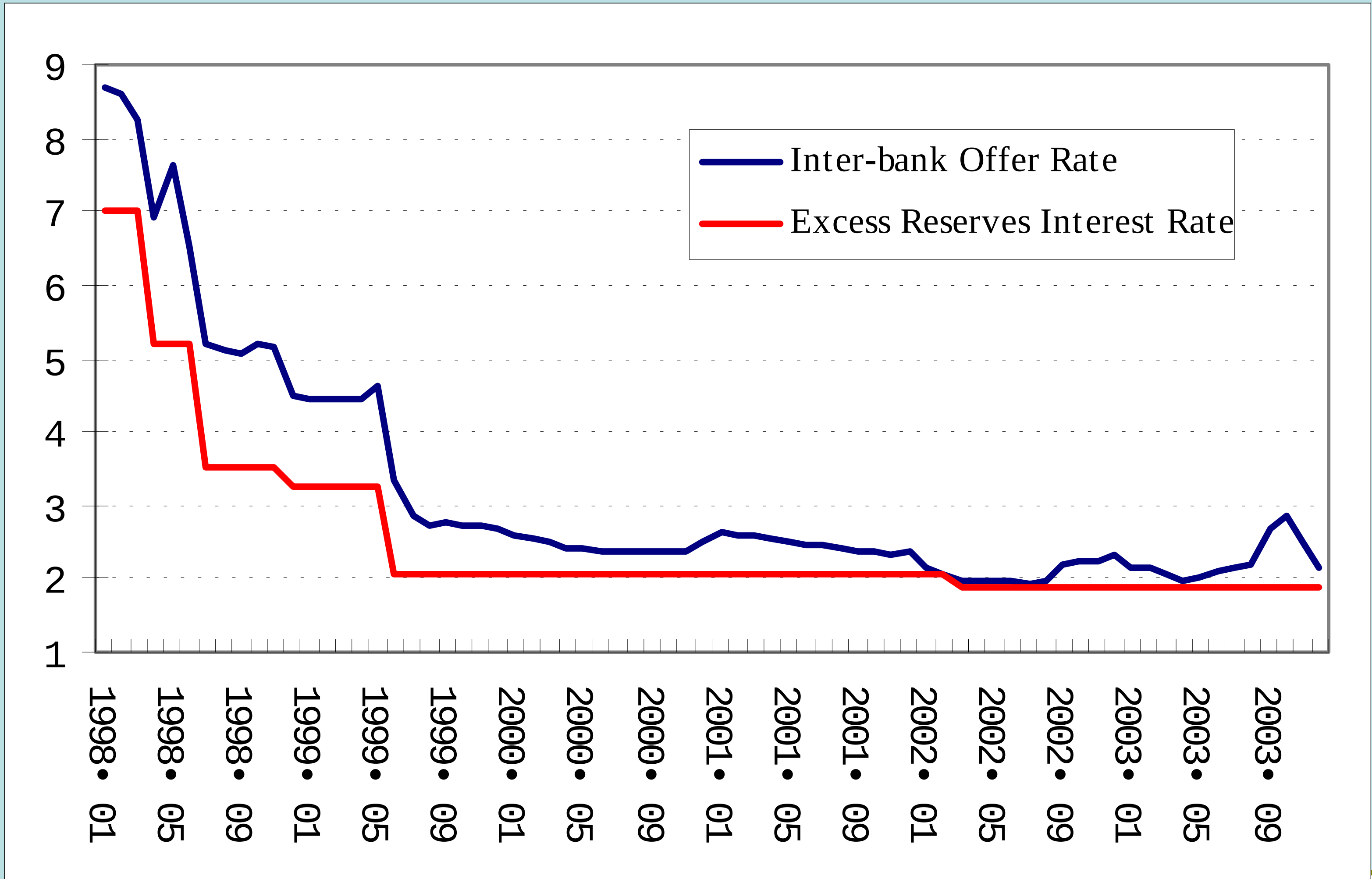
4. Reserves System and Reserves Rate

- The particularities of China‘s reserves system
- Legal reserves rate
  - Relatively high reserves rate
  - Legal reserves can’t be used for payments and liquidations
  - But because of the adopted multi-layer national banking system, every single bank internally has used reserves for payments.
- Relatively high excess reserves rate
- The central bank pays interests for the reserves
  - The interest rates for legal reserves and excess reserves were same
  - Since 2003, the interest rates have been differentiated

(Continued)

- Due to above conditions, the implementation of monetary policies has been obstructed
- Excess reserves rates actually “absorb” and “cushion” the impacts of the central bank’s monetary policies.
  - The central bank’s policy to adjust the legal reserves rate doesn’t necessarily cause the corresponding adjustments of lending size in commercial banks, therefore, it doesn’t necessarily cause the adjustments of monetary supply neither.
  - The central bank’s policy to regulate the monetary base is likely to be “absorbed” by excess reserves.
  - The channel to implement the monetary policies is obstructed.
- Relatively high interest rates for reserves
  - The interest rate for excess reserves makes up of China’s “zero” interest rate
  - Limit the central bank’s regulating power on interest rates, especially downward.
  - Provide commercial banks and other financial institutes, which are able to trade in different markets at the same time, the opportunities of arbitrage, and weaken the effectiveness of the central bank’s monetary policies.

Interest rate for excess reserves is "zero" interest rate: in comparison with the inter-bank offer rate



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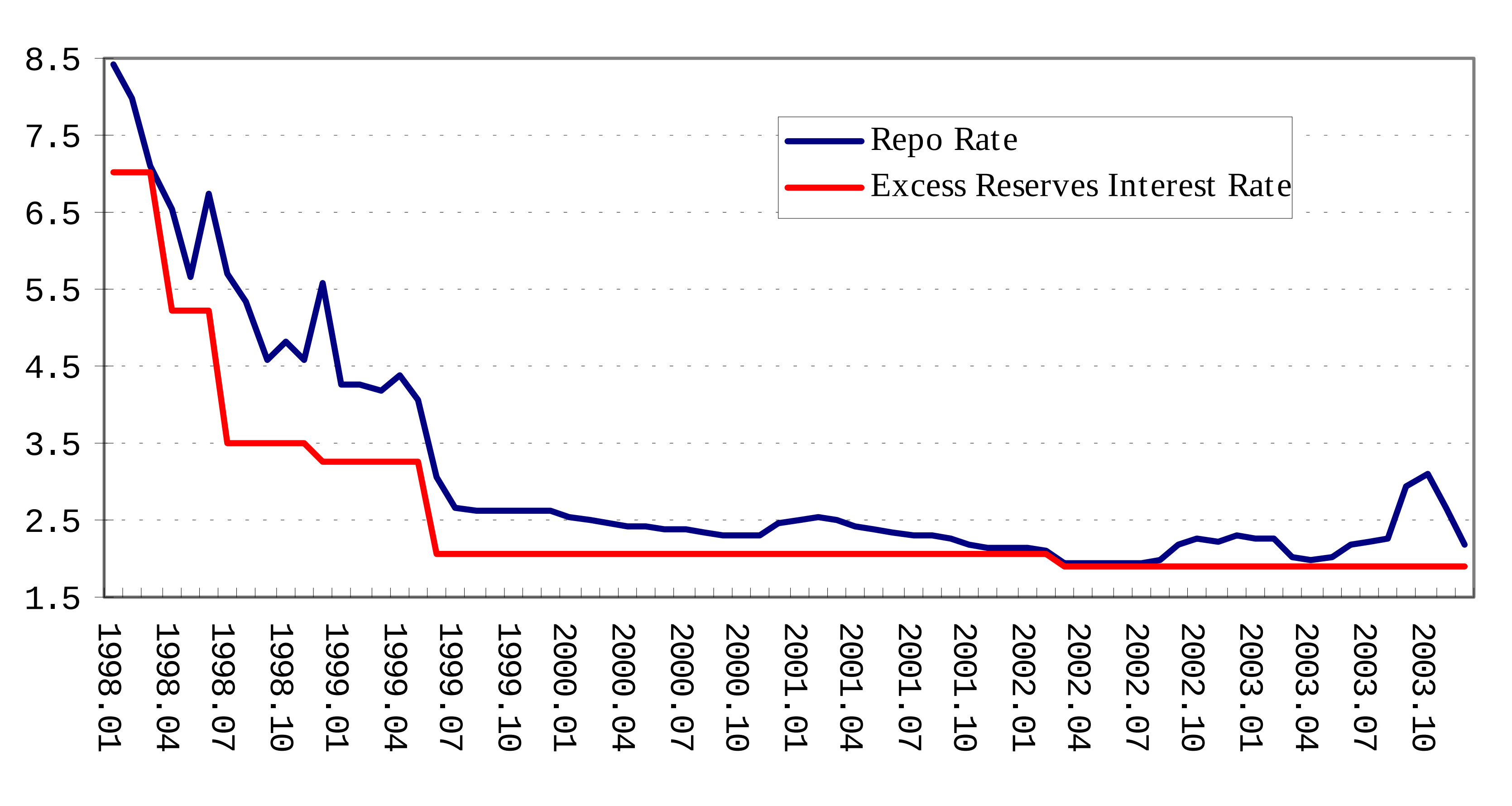
Interest rate for excess reserves is "zero" interest rate: in comparison with the repo rate



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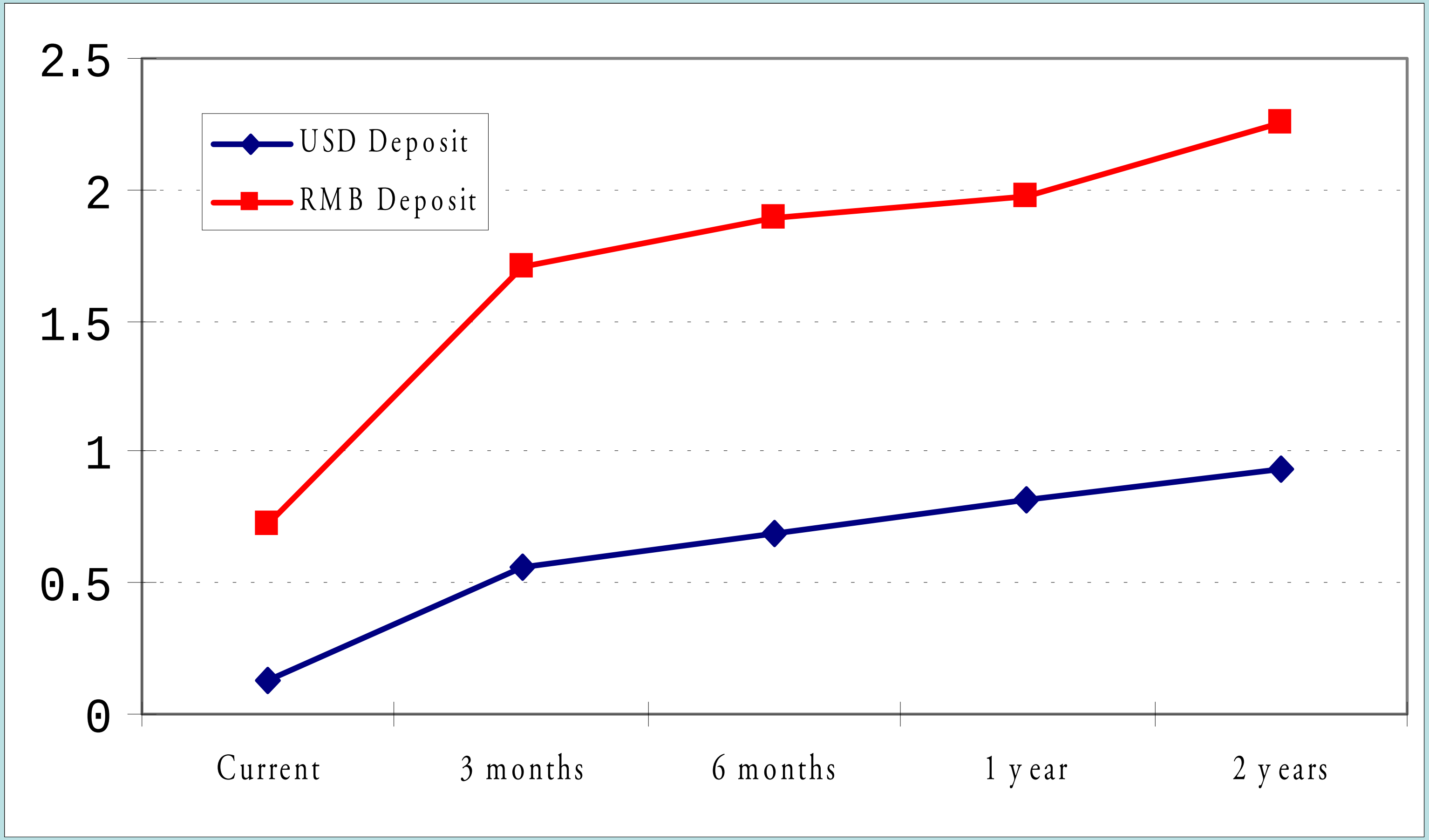
5. The Interest Spread between RMB and USD

- Interest Spread and M2
  - The interest spread's impacts on absolute value of M2
    - The interest spread has notable effects on M2 on which the trend (linear trend) is removed, and the model is very explanative.
    - A causal relationship between the absolute value of M2 and the interest spread.
  - The interest spread's impacts on M2's year-on-year growth rate
    - The interest spread also has very visible effects on M2's year-on-year growth rate, and the model is very explanative, too.
    - M2's year-on-year growth rate is unilaterally impacted by the interest spread. This represents that the driving force of M2 supply's growth after the end of 2000 has been the interest spread between RMB and USD.
  - Under the fixed exchange rate to USD policy, just arbitrage activities are more than enough to affect M2.
- Interest Spread and M1: no notable relationship

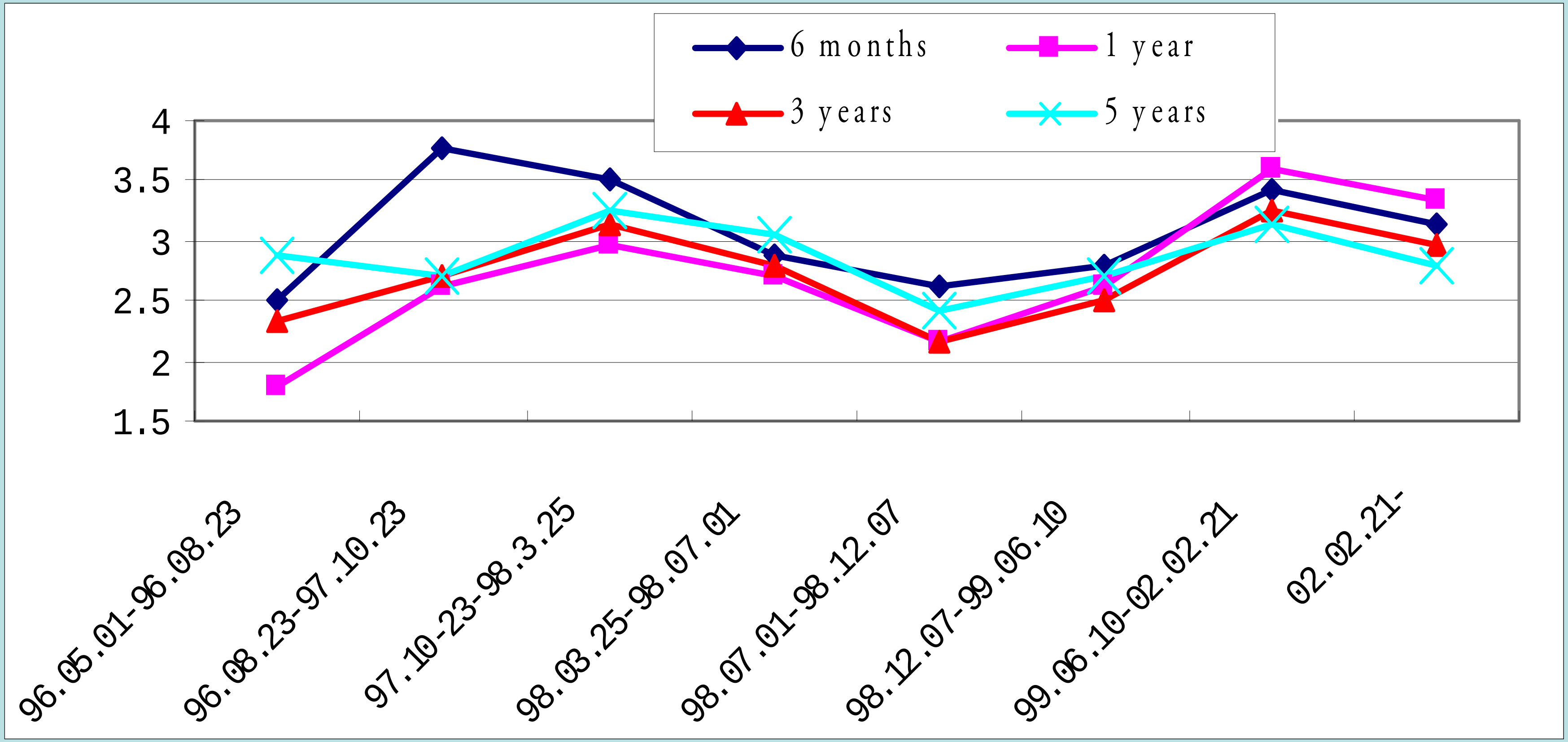
The comparison between RMB and USD deposit rates with same terms



Before July, 2003

Full Linkage

The trend of the interest spread between USD and RMB



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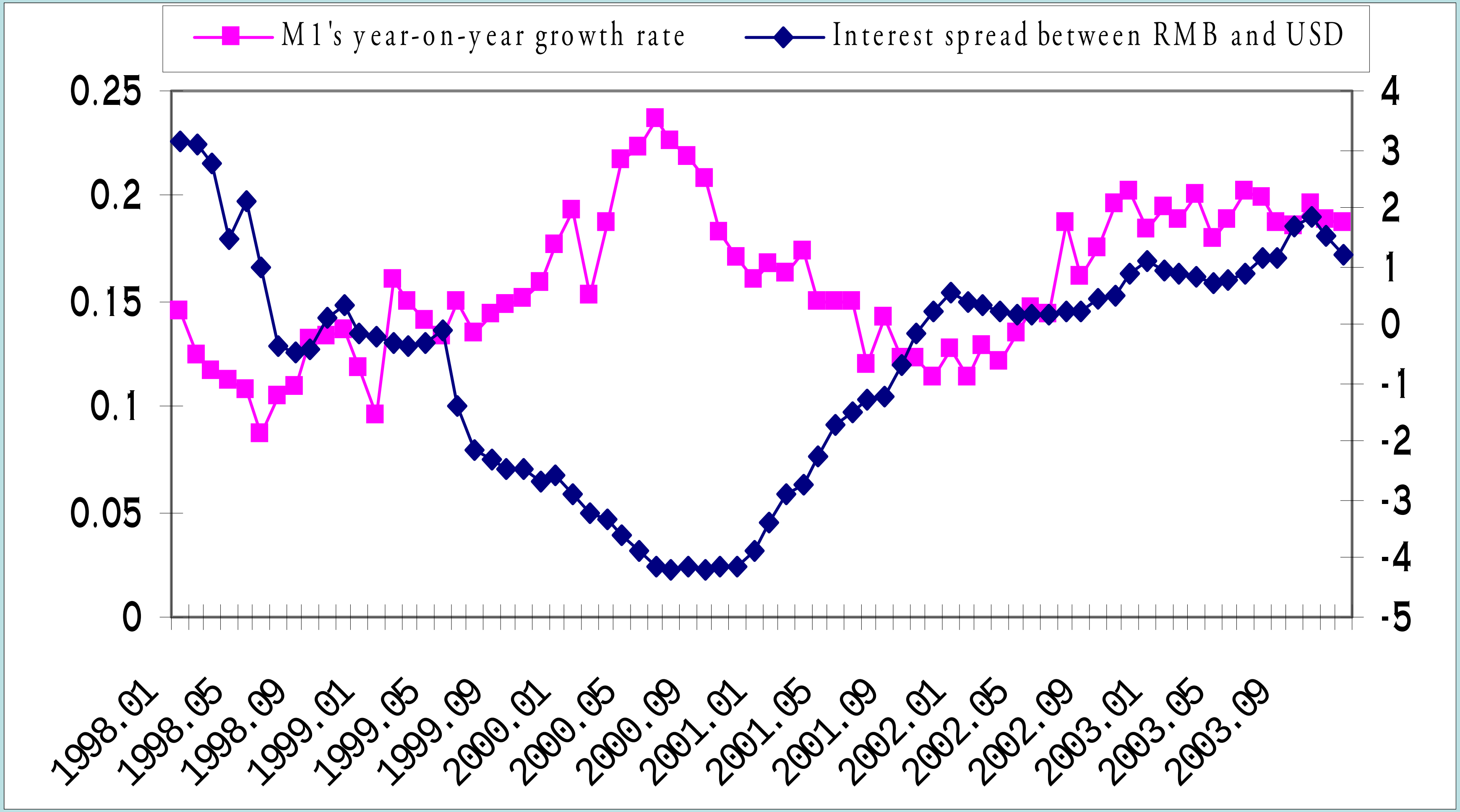
M1's year-on-year growth rate and the interest spread between RMB and USD



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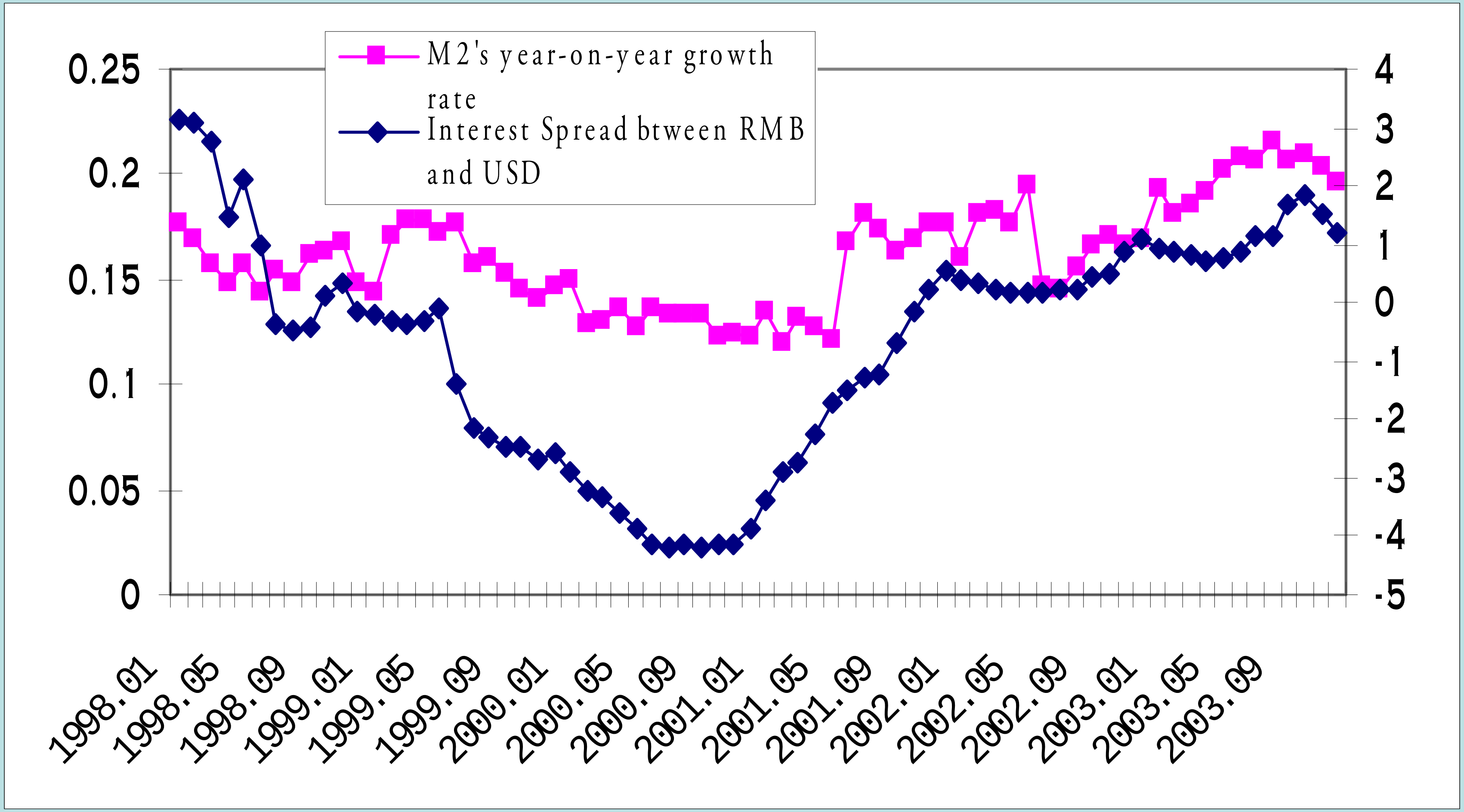
M2's year-on-year growth rate and the interest spread between RMB and USD



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6. Discount and Rediscount

- The market development of rediscount rates and papers
  - Rediscount rate has not been considered in the central bank's main policies regarding interest rates
  - The changes of rediscount rates have impacts on the development of paper market
  - The relationship between rediscount market and paper market: money supply
- In 2003, the development of discount market
  - More than 1000 billion RMB yuan; Most of them migrated amongst banks.
    - To guarantee between banks?
    - To fulfill the lending quota?
  - Banks pay close attentions to discount rates which are very crucial to banks' costs

4. Current Policies and market based reform of Interest Rates

The Determinants of Current Interest Rate Policies: Economic Trend

- Regarding of the domestic macroeconomic situation, especially the price, interest rate rise is necessary.
- It is questionable that the price’s uptrend can continuously last. Some signs already show that the uptrend is going to end, the trend will be reversed as early as the second half of this year.
  - Price control policies are gradually showing impacts
  - The price rise rate of upstream products is higher than that of downstream products, and the price rise of upstream products can’t effectively be transmitted to downstream products (as a result, downstream industries would suffer profit drops or even losses), therefore, it is anticipated that the price’s uptrend will be adjusted automatically by the market.
- Interest rate rise should be handled very cautiously by considering the price trends even though it is very necessary in term of macroeconomic control.

The Determinants of Current Interest Rate Policies: Money Supply

- Overall, the money surplus is still the main trend.
  - Deposits, which still increase rapidly, are the major sources of operational capitals in Chinese bank-dominated economy;
  - Excess reserves remains at a relatively high level;
  - The poured-in foreign capitals and the exchanges of foreign-currency assets into RMB assets by individuals and enterprises have increasingly impacts on domestic money supply;
- The sufficiency of domestic money supply doesn’t boost the rise of interest rates

The Determinants of Current Interest Rate Policies: The Interest Spread between RMB and USD

- The large interest spread between RMB and foreign currencies
  - Currently, RMB one-year-term deposit rate is 1.98%, while domestic USD one-year-term deposit rate is 0.5625%. The interest spread between domestic RMB and USD is 1.4%; US one-year CD rate is 1.06%, and the federal funds rate is 1%; The interest spread between domestic RMB and foreign USD is more than 0.92%.
  - In the first four months of this year, with the deficit on international balance of payments, Bank of China still purchased more than 36 billion US dollars, which shows how large the arbitrage scale is.
- The final results to be measured:
  - Assuming: RMB interest rates rise, and the RMB exchange rate remains still:
  - The driving force of arbitrage on foreign currencies is strengthened;
  - The foreign currencies increasingly pour in China;
  - Bank of China purchases more foreign currencies;
  - RMB supply rises;
  - Inflation rises;

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Further Question: The preconditions of "Price" Tool's Validity

- Interest rate needs preconditions to be effective
  - In developed countries, the adjustments aiming at the benchmark interest rate have impacts on all interest rates, and facilitate the formations of risk structures and term structures according to differentiations among risks and terms.
  - The policies to adjust interest rates are also the policies to regulate money supply, that is, a reversed-motion relationship between interest rates and money supply. For example, when the U.S. announces a interest rate rise, it represents that the circulation will be tightened.
- Interest rate has become the most effective tool of monetary policies.

China: The relationship between "Price" and "Quantity" tools

- It is very complex in China. According to the statistic analysis, the changes in the quantity of money supply are not very sensitive to the adjustments of interest rates
  - In absolute value, M2 and M1 are correlated to inter-bank offer rate in a level of above 0.05;
  - Based on year-on-year and month-on-month growth rates, M1 is unrelated to the two interest rates;
  - M2 is related to the two interest rates based on year-on-year growth rate. But the relationship is positive correlation, which is not rational. Therefore, we can conclude: the two are affected by other third-party forces.
- The market based reform of interest rate is a main path to remedy the twisted relationship stated above.
- Current Assignment: Adjusting the interest rate structures to boost the market based reform

Thank You !

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